

**Summary Minutes of the  
U.S. Environmental Protection Agency (EPA)  
Clean Air Scientific Advisory Committee (CASAC)  
Lead Review Panel  
Public Teleconference  
September 15, 2011**

Date and Time: Thursday, September 15, 2011, 12:00 PM – 3:00 PM ET

Location: Teleconference Only

Purpose: The purpose of the teleconference was to discuss the Panel's draft letter on EPA's Integrated Science Assessment (ISA).

Participants: CASAC Lead Panel (for full roster, see Attachment A)

Dr. H. Christopher Frey, Chair

Mr. George Allen

Dr. Herbert Allen

Dr. Deborah Cory-Slechta

Dr. Cliff Davidson

Dr. Sean Hays

Dr. Philip Hopke

Dr. Chris Johnson

Dr. Susan Korrick

Dr. Michael Kosnett

Dr. Roman Lanno

Mr. Richard Poirot

Dr. Joel Pounds

Dr. William Stubblefield

Dr. Gail Wasserman

Dr. Michael Weitzman

Mr. Aaron Yeow, Designated Federal Officer (DFO)

Dr. John Vandenberg, EPA National Center for Environmental Assessment (NCEA)

Dr. Bryan Hubbell, EPA Office of Air Quality and Planning Standards

Other Attendees (See Attachment B)

**Thursday, September 15, 2011**

### **Opening Remarks**

Mr. Aaron Yeow, the DFO for the CASAC Lead Review Panel, opened the meeting. He noted that as required under the Federal Advisory Committee Act (FACA), the Panel's deliberations are held in public with advanced notice given in the Federal Register<sup>1</sup>, and the meeting minutes will be made publicly available after the meeting. He noted that the Panel did not receive any public comments and did not receive any requests for oral public statements. He also noted that the Panel members are subject to compliance with federal ethics regulations and conflict-of-interest laws that pertain to them. He then turned the meeting over to Dr. Chris Frey, Chair of the CASAC Lead Review Panel.

Dr. Frey welcomed everyone and indicated that the purpose of the meeting was to review the Panel's letter on EPA's ISA<sup>2</sup>. He reviewed the Agenda for the meeting<sup>3</sup>, and turned it over to EPA for their remarks.

### **EPA Remarks**

Dr. John Vandenberg, EPA NCEA, expressed EPA's appreciation for the work undertaken by the Panel. He had one clarifying question regarding the Panel's recommendation in the response to charge question #7 for EPA to evaluate nonpublished data, such as data generated for the European Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). He asked for the Panel's clarification on how to go about doing that, noting the difficulty in obtaining as well as evaluating the quality of the data. He stated that doing so would represent a departure from what NCEA typically does, which is to evaluate only published, peer-reviewed data.

One of the panel members indicated that the data submitted to REACH have been reviewed for quality and data in the dossiers are peer reviewed according to the Clemish process. He indicated that at the July 20-21, 2011 meeting, the representative from the International Lead Zinc Research Organization (ILZRO) stated that industry would provide this data to EPA.

Dr. Bryan Hubbell, EPA OAQPS, discussed the Lead NAAQS process and schedule. He indicated during the spring 2012 CASAC meeting on the second draft ISA, EPA will brief the panel on aspects of the Policy Assessment Document (PAD) related to risk, such as aviation gasoline.

### **Response to Charge Questions**

For the response to charge question 1, there was discussion regarding clarification of the Panel's statement regarding high does in toxicology and/or in vitro studies. It was agreed that Dr. Davidson would provide some revised language to clarify the statement.

There were not many changes that needed to be made to the response to charge question 3, aside from minor editorial changes.

For the response to charge question 2, there was discussion on providing further detail on what specific key features from chapter 5 were missing from chapter 2, as well as clarifying the Panel's statement regarding clinical significance/magnitude of effects. Furthermore, there was discussion about how the causal framework was not applied well in the document and how the Panel's response needs to make this point clear. It was agreed that Dr. Korrick, with input from Dr. Kosnett would make these revisions.

Dr. Kosnett mentioned some missing text that he provided to the lead author of the response to charge question 4 and agreed to send it again for inclusion. There was discussion about the definition of absorption and bioavailability and it was agreed to remove these definitions and recommend to EPA to clearly define these terms and use them consistently. It was agreed that Dr. Hays would make all the revisions discussed.

For the response to charge question 5, it was agreed to make the language pertaining to clinical significance consistent with the revisions that will be made to the response to charge question 2. There was discussion over item 8 on page B-13 regarding modes of action and it was agreed that Dr. Cory-Slechta and Dr. Kosnett would work on revised language to send to Dr. Wasserman, who would make all the revisions for the response to charge question 5.

Dr. Cory-Slechta agreed to revise lines 5-9 of p. B-16 to clarify the Panel's statement regarding the document's emphasis of various age groups.

Dr. Lanno agreed to make revisions to the response for charge question 7, incorporating the earlier discussion regarding REACH and to fully answer all the subquestions within the charge question.

### **Letter to Administrator**

One member commented that perhaps the more minor comments could be excluded from the letter so that the major points are not buried. Another member mentioned that one major point that does not come through is that the causal framework was not adequately applied throughout the document. It was agreed that any revisions made to the response to charge questions would be reflected in the letter as well.

Dr. Frey discussed next steps and action items. With the business concluded, the Designated Federal Officer adjourned the meeting at 3:00 PM ET.

Respectfully Submitted:

*/Signed/*

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Mr. Aaron Yeow  
Designated Federal Officer  
EPA SAB Staff Office

Certified as Accurate:

*/Signed/*

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Dr. H. Christopher Frey  
Chair  
CASAC Lead Review Panel

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by Panel members during the course of deliberations within the meeting. Such ideas, suggestions and deliberations do not necessarily reflect consensus advice from the Panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters or reports prepared and transmitted to the EPA Administrator following the public meetings.

## Materials Cited

The following meeting materials are available on the CASAC website:

<http://www.epa.gov/casac>, at the [September 15, 2011 CASAC Lead Review Panel Meeting page](#):

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<sup>1</sup> Federal Register Notice Announcing the Meeting

<sup>2</sup> CASAC Review of EPA's Integrated Science Assessment for Lead (First External Review Draft – May 2011)

<sup>3</sup> Agenda for September 15, 2011 Public Meeting

## **ATTACHMENT A - ROSTER**

### **U.S. Environmental Protection Agency Clean Air Scientific Advisory Committee CASAC Lead Review Panel (2010-2013)**

#### **CHAIR**

**Dr. H. Christopher Frey**, Professor, Department of Civil, Construction and Environmental Engineering, College of Engineering, North Carolina State University, Raleigh, NC

#### **MEMBERS**

**Mr. George A. Allen**, Senior Scientist, Northeast States for Coordinated Air Use Management (NESCAUM), Boston, MA

**Dr. Herbert Allen**, Professor Emeritus, Department of Civil and Environmental Engineering, University of Delaware, Newark, DE

**Dr. Richard Canfield\***, Senior Research Associate, Division of Nutritional Sciences, Cornell University, Ithaca, NY

**Dr. Deborah Cory-Slechta**, Professor, Department of Environmental Medicine, School of Medicine and Dentistry, University of Rochester, Rochester, NY

**Dr. Cliff Davidson**, Professor, Civil and Environmental Engineering, Syracuse University, Syracuse, NY

**Dr. Philip E. Goodrum**, Senior Project Manager, Environmental Resources Management (ERM), Dewitt, NY

**Dr. Sean Hays**, President, Summit Toxicology, Allenspark, CO

**Dr. Philip Hopke**, Bayard D. Clarkson Distinguished Professor, Department of Chemical and Biomolecular Engineering, Clarkson University, Potsdam, NY

**Dr. Chris Johnson**, Professor, Department of Civil and Environmental Engineering, Syracuse University, Syracuse, NY

**Dr. Susan Korrick**, Assistant Professor of Medicine, Department of Medicine, Brigham and Women's Hospital, Channing Laboratory, Harvard Medical School, Boston, MA

**Dr. Michael Kosnett**, Associate Clinical Professor, Division of Clinical Pharmacology and Toxicology, Department of Medicine, University of Colorado Health Sciences Center, Denver, CO

**Dr. Roman Lanno**, Associate Professor and Associate Chair, Department of Evolution, Ecology, and Organismal Biology, Ohio State University, Columbus, OH

**Mr. Richard L. Poirot**, Environmental Analyst, Air Pollution Control Division, Department of Environmental Conservation, Vermont Agency of Natural Resources, Waterbury, VT

**Dr. Joel Pounds**, Scientist, Cell Biology & Biochemistry, Biological Sciences Division, Battelle - Pacific Northwest National Laboratory, Richland, WA

**Dr. Michael Rabinowitz**, Geochemist, Clinical Instructor in Neurology, Harvard University, Newport, RI

**Dr. William Stubblefield**, Senior Research Professor, Department of Molecular and Environmental Toxicology, Oregon State University, Corvallis, OR

**Dr. Ian von Lindern**, President, TerraGraphics Environmental Engineering, Inc., Moscow, ID

**Dr. Gail Wasserman**, Professor of Clinical Psychology in Child Psychiatry, Division of Child and Adolescent Psychiatry, College of Physicians and Surgeons, Columbia University, New York, NY

**Dr. Michael Weitzman**, Professor, Pediatrics; Psychiatry, New York University School of Medicine, New York, NY

\*Did not participate in this review.

#### **SCIENCE ADVISORY BOARD STAFF**

**Mr. Aaron Yeow**, Designated Federal Officer, U.S. Environmental Protection Agency, Science Advisory Board (1400R), 1200 Pennsylvania Avenue, NW, Washington, DC, Phone: 202-564-2050, Fax: 202-565-2098, (yeow.aaron@epa.gov)

**ATTACHMENT B – Other Attendees  
CASAC Lead Panel Public Teleconference**

**September 15, 2011**

| <b>Name</b>               | <b>Affiliation</b>   |
|---------------------------|--|
| Bertrand, Charlotte       | EPA  |
| Brown, James              | EPA  |
| Burkett, Jeff             | Empire District Electric Co.                                   |
| Campleman, Sharan         | Electric Power Research Institute (EPRI)                       |
| Corrales, Mark            | EPA  |
| Curry, Bridgid            | EPA  |
| Davis, Charles            | North Carolina Department of Environment and Natural Resources |
| Diamond, Gary             | SRC  |
| Hawkins, Bernard F., Jr.  | Nelson Mullins Riley & Scarborough LLP                         |
| Kirrane, Ellen            | EPA  |
| Kotchmar, Dennis          | EPA  |
| Lassiter, Meredith        | EPA  |
| MacDonald, Stephen        | Health Canada  |
| Macey, Kristin            | Health Canada  |
| McAngus, Jess             | Spirit Environmental, LLC                                      |
| McMahon, Bobby            | InsideEPA  |
| Miksad, Roger             | Wiley Rein LLP   |
| Nystrom, Marci            | California Air Resources Board (CARB)                          |
| Orlin, David              | EPA  |
| Osterling Owens, Beth     | EPA  |
| Patel, Molini             | EPA  |
| Rak, Drew                 | Noblis   |
| Richmond-Bryant, Jennifer | EPA  |
| Ross, Mary                | EPA  |
| Sexton, Will              | Florida Department of Environmental Protection                 |
| Smith, Kathleen           | Missouri Coalition for the Environment                         |
| Steichen, Ted             | American Petroleum Institute (API)                             |
| Sun, Gulan                | Texas Council of Environmental Quality (TCEQ)                  |
| Vinikoor-Imler, Lisa      | EPA  |
| Volpe, Rosalind           | International Lead Zinc Research Organization (ILZRO)          |
| Walsh, Debra              | EPA  |
| Weaver, Virginia          | Johns Hopkins University                                       |
| Wichers-Stanek, Lindsay   | EPA  |
| Wilson, Linda             | New York State Attorney General's Office                       |